

***LineUp With Math™* Alignment**
2005 Connecticut Mathematics Curriculum Framework

2. NUMERICAL AND PROPORTIONAL REASONING: Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

How are quantitative relationships represented by numbers?

2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.

Performance Standards & Expected Performances

d. Represent ratios and proportions and solve problems using models and pictures.

(3) Use ratios and proportions to solve practical problems such as interpreting maps and scale drawings or identifying probability.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

3. GEOMETRY AND MEASUREMENT: Shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools and technologies.

How do geometric relationships and measurements help us to solve problems and make sense of our world?

3.2 Use spatial reasoning, location and geometric relationships to solve problems.

3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.

Performance Standards & Expected Performances

a. Solve problems in the measure of time and in the conversion of units of length in the customary and metric systems using specific ratios.

(2) Solve problems involving the conversion of measure of time and elapsed time (days, hours, minutes and seconds).

(3) Estimate and choose appropriate units and tools to measure and solve a variety of problems involving length, perimeter, area, volume, capacity, mass, time, angle and temperature.

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.